



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/735,093	12/12/2000	David Blanset	061607-1610	5336
24504	7590	09/29/2004	EXAMINER	
THOMAS, KAYDEN, HORSTEMEYER & RISLEY, LLP 100 GALLERIA PARKWAY, NW STE 1750 ATLANTA, GA 30339-5948			WONG, BLANCHE	
			ART UNIT	PAPER NUMBER
			2667	

DATE MAILED: 09/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/735,093

Applicant(s)

BLANSET ET AL.

Examiner

Blanche Wong

Art Unit

2667

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 12 December 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-64 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 11-20,22-37,45-51,53-64 is/are allowed.
- 6) ☒ Claim(s) 1,2,21,38 and 52 is/are rejected.
- 7) ☒ Claim(s) 3-10 and 39-44 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 December 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Drawings*

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: an uplink interface data module 130, cross-connect data module 132, backplane interface data module 134, VCL data module 136, a line card data module 138, an auto-configuration data module 140, and a DSL port data module 142, as recited from p.15, ln. 29 through p. 18, ln. 20.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "26" and "28" have both been used to designate central office. 26 should be 28 in Fig. 2.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended

Art Unit: 2667

replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

3. The abstract of the disclosure is objected to because it is not specific to the invention. The abstract describes SCM only. Correction is required. See MPEP § 608.01(b).

4. The disclosure is objected to because of the following informalities: serial number left blank. Examiner noted that provisional application entitled "Systems and Methods for Automatically Configuring Cross-Connections in a DSLAM," filed on December 1, 2000, has Serial No. 60/250,494.

Appropriate correction is required.

5. The disclosure is objected to because of the following informalities: misnumbering, mislabeling, missing numbers.

On p. 8, ln. 3, both network hub and workstation are numbered 42.

On p. 11, ln. 2, network should be numbered 32.

On p. 11, ln. 8, line cards should be numbered 62.

On p. 11, ln. 13, and ln. 19, subscriber 22, 24 should be distinctly labeled “residential subscriber 22” and “commercial subscriber 24.”

On p. 13, ln. 30 – p. 14, ln. 1, line card should be numbered 62.

On p. 14, ln. 1, channels should be numbered 54.

Appropriate correction is required.

### ***Claim Objections***

6. Claims 1,2,11,22 are objected to because of the following informalities: inconsistency.

Cl. 1, ln. 3-4 and ln. 6-7, recites – digital subscriber line communications channels – whereas cl. 2, ln 2, recites – digital subscriber communications channels --.  
Cl. 2 should also read “digital subscriber line communications channel.”

Cl. 11, ln. 2, recites – digital subscriber line channels – and should read “digital subscriber line *communications* channels,” and ln. 4 recites – digital subscriber communications channels – and should read “digital subscriber *line* communications channels.” [Emphasis added.]

Similar corrections throughout the claims are requested.

Appropriate correction is required.

7. Claim 30 is objected to because of the following informalities: missing punctuation.

Cl. 30, ln. 6, there is a missing semicolon after limitation “a. a first portion ...”

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. **Claims 1,2,21,52** are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Fosmark et al. (U.S. Pat No. 6,084,881).

With regard to claims 1,21,52, Fosmark discloses a DSLAM 60 (xDSL interface, Fig. 4) and a method for providing signal connectivity, comprising

a. a means for receiving 74 (CPE interface) a plurality of data communication channels;

b. a means for receiving 62 (xDSL termination unit) a plurality of DSL communications channels; and

c. a means for automatically configuring 66 (switch receives control signal and the setting of switch can be accomplished in hardware or software either manually or automatically; see also col. 5, ln. 29-49) a plurality of cross-connects (switch 66 provides a dual path for data traffic communication through xDSL interface 60) between the plurality of data communications channels and the plurality of digital subscriber line communications channels.

With regard to claims 2,21,52, Fosmark further discloses a DSLAM wherein the plurality of data communications channels and the plurality of DSL communications channels are adapted to carry ATM traffic col. 5, ln. 37-38.

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

11. **Claim 38** is rejected under 35 U.S.C. 102(e) as being clearly anticipated by Adas et al. (U.S. Pat No. 6,661,795).

With regard to claim 38, Adas discloses an ATM switch 406 (Fig. 4), comprising:

- a. a means for receiving (see I/O 6 at ATM switch 406) a plurality of data communication channels;
- b. a means for receiving (see I/O 5 at ATM switch 406) a plurality of DSL communications channels; and
- c. a means for automatically configuring (col. 7, ln. 42-62) a plurality of cross-connects (ATM switch 406 establishes virtual connections) between the plurality of data communications channels and the plurality of digital subscriber line communications channels.

***Allowable Subject Matter***

12. **Claims 11-20,22-37,45-51,53-64** are allowed.
13. **Claims 3-10,39-44** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
14. The following is a statement of reasons for the indication of allowable subject matter:

With regard to claims 11 and 45, the prior art of record fails to anticipate or make obvious all limitations of a DSLAM, comprising: "a backplane interface having a first plurality of virtual circuit links" and "an uplink interface having a second plurality of virtual circuit links."

With regard to claims 22 and 53, the prior art of record fails to anticipate or make obvious a method for automatically configuring a plurality of cross connects in a DSLAM, comprising: "obtaining a default logical VPI/VCi address associated with the plurality of data communications channels; defining a first plurality of unique logical VPI/VCi addresses based on a predefined set of rules for incrementing logical VPI/VCi addresses, each of the first plurality of unique logical VPI/VCi addresses associated with one of the plurality of DSL communications channels; determining a second plurality of unique logical VPI/VCi addresses based on the default logical VPI/VCi address and the predefined set of rules; creating a plurality of cross-connects between the plurality of data communications channels and the plurality of digital subscriber line



communications channels by linking the first and second unique logical VPI/VCi addresses.”

With regard to claims 30 and 59, the prior art of record fails to anticipate or make obvious a computer-readable medium comprising: “a first portion of code for obtaining a default logical VPI/VCi address associated with the plurality of data communications channels; a second portion of code for defining a first plurality of unique logical VPI/VCi addresses based on a predefined set of rules for incrementing logical VPI/VCi addresses, each of the first plurality of unique logical VPI/VCi addresses associated with one of the plurality of digital subscriber line communications channels; a third portion of code for determining a second plurality of unique logical VPI/VCi addresses based on the default logical VPI/VCi address and the predefined set of rules; and a fourth portion of code for creating a plurality of cross-connects between the plurality of data communications channels and the plurality of digital subscriber line channels by linking the first and second unique logical VPI/VCi addresses.

### ***Conclusion***

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kaplan et al. (U.S. Pat No. 6,680,904) discloses access module 20 which connects to a plurality of data communication channels (core network interface 24), a plurality of DSL communication channels (port 1-N 28), and cross-connection (switch 29). Fig. 1.

Todd (U.S. Pat No. 6,714,516) discloses access network 104.

Ortega et al. (U.S. Pat No. 6,711,162) discloses a plurality of data communication channels, a plurality of DSL communication channels, ADSL 16, DSLAM 34, ATM 38,39, PSTN (telephone switch 36 and public network). Fig. 1.

Hagirahim et al. (U.S. Pat No. 6,771,763) discloses a plurality of data communication channels, a plurality of DSL communications channels, SDSL 120,200, DSLAM 130, 190, ATM 140,180, PSTN 160.

Modarressi et al. (U.S. Pat No. 6,667,971) discloses a plurality of data communication channels, a plurality of DSL communications channels, ADSL 104, DSLAM 106, and ATM 313.

Smith (U.S. Pat No. 6,643,253) discloses a plurality of data communication channels, a plurality of DSL communications channels, DSL 115, DSLAM 175, and PSTN 190.

Chea, Jr. et al. (U.S. Pat No. 6,574,313 and 6,546,089) discloses a plurality of data communication channels, a plurality of DSL communications channels, DSLAM 8, ATM 6, PSTN.

Suzuki (U.S. Pat No. 6,529,479) discloses a plurality of data communication channels, a plurality of DSL communications channels, DSLAM 102, and ATM switch 103.

Liu (U.S. Pat No. 6,081,517 and 6,349,096 and 6,130,879) discloses a plurality of data communication channels, a plurality of DSL communications channels, DSL (see Fig. 4A), DSLAM 240, PSTN (see Fig. 2), and line interface 249.

Gelman et al. (U.S. Pat No. 6,493,348) discloses a plurality of data communication channels, a plurality of DSL communications channels, DSL 120, ATM (see Fig. 3), and line cards (see Fig. 4).

DeNap et al. (U.S. Pat No. 6,490,273) discloses an xDSL/ATM architecture using PVC.

Kaplan et al. (U.S. Pat No. 6,141,339) discloses a telecommunications system including a plurality of communication channels, ATM switch 441, interfaces Fig. 2, backbone 312, line cards Fig. 3.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Blanche Wong whose telephone number is 571-272-3177. The examiner can normally be reached on Monday through Friday, 830am to 530pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi H Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

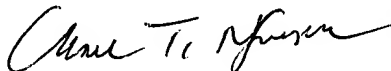
Art Unit: 2667

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Res*

BW

September 14, 2004



CHAU NGUYEN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600